

IOWA STATE UNIVERSITY

Digital Repository

Volume 78

Article 10

1-1-1991

Natural Resources: Now and In the Future

Sylvan Runkel
Iowa State University

Follow this and additional works at: <https://lib.dr.iastate.edu/amesforester>



Part of the [Forest Sciences Commons](#)

Recommended Citation

Runkel, Sylvan (1991) "Natural Resources: Now and In the Future," *Ames Forester*: Vol. 78 , Article 10.
Available at: <https://lib.dr.iastate.edu/amesforester/vol78/iss1/10>

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Ames Forester by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

NATURAL RESOURCES: NOW AND IN THE FUTURE

The human species, as a member of the earth's biotic community, is wholly dependent on the natural resources which are found in a unique, life-sustaining combination here on planet Earth!

So far as we know, there is no other planet in our solar system that would support the many kinds of interdependent life forms that are found on our home, planet Earth!

The human species however, with a bigger brain, and an opposable thumb, has evolved as a form of life which is able to manipulate the environment-supposedly for our benefit.

However, within the last few years, it is becoming increasingly evident that this is not always the case. The dramatic increase in the world's population, because of our advantage, is everywhere apparent. Because of this, the resultant widespread and heavy pressures on the natural resources, and our total environment, are also becoming increasingly apparent.

Our high-tech ability to exploit our natural environment has led to the rapid disappearance of many species of plants and animals-as well as large ecological life support systems. This, in turn, has, and is, causing increased concern about the future of our world life support systems.

The changes are evident in the widespread increase of pollution showing up in the air, soil, and water all over the globe. The hole in the ozone layer, global warming, and acid rain all give credence to the idea that we may have reached, or exceeded, the carrying capacity of our world environment.

Professor Ralph Cod'Arge, distinguished professor of economics at the University of Wyoming, asks this question: "How close are we to reaching the ultimate limits in our exploiting our natural environment"? So, what of the future in this country, and this world? Although it is not universally recognized in this country, the natural resources available to the human species are limited. Any future development must stay within the world's capacity to continue to supply human needs. To do this, conditions favorable to the entire "web of life" must be maintained in a continuing, ongoing basis.

Back in the 17th century, philosophers debated the future of human kind, and their conclusions were not encouraging! They believed that human kind was doomed to live (if at all), at a low subsistence level because the world's productive lands were limited, while the human ability to reproduce, and continue to increase the population, was not. In other words, population pressures on the environment will continue to increase until humankind will be forced to live in a continually shrinking productive world.

This bleak scenario is already beginning to be apparent, especially in some of the Third World countries where the land will no longer support the people living on it!

In line with these considerations, it would seem that we should take steps to put limits on our population, stop the over-exploitation of our natural resources, and attempt to get our lands, with all our natural resources, into a permanently and productively sustainable type of use!

As Eugene P. Odum (University of Georgia)

and Howard T. Odum (University of Florida), have concluded in their paper, *Natural Areas as Necessary Components of Mans' Total Environment*:

"We need to keep at least fifty percent or more of the biosphere in a natural state if we are to maintain a good quality life for human kind. Natural environment is defined as - that part of Mans' life support system which operates without energetic or economic output from the power flows controlled by Man."

The free services provided by the natural environment include many kinds of useful products: foods, wood, watershed, erosion and flood protection, clean air and water, recycling wastes, and many others!

If we had to do without these free services we would not be able to exist! The world's forests are an important part of the world's natural life support system! They will continue to be important!

The trained Natural Resource Manager, now and in the future, must manage the natural communities in his charge to produce, in a sustained manner, all of the various useful natural products which the healthful environment produces. The world needs a healthful environment, and the healthful environment needs dedicated and knowledgeable natural resource managers!

The economics of our handling of natural resources has been too often tied solely to the profit motive, often times to the detriment of a quality environment! The way of the future must ensure that the welfare of our environment comes first, and the profit motive comes second! However, the economics of environmental activity must be favorable to the ones who are doing it - or it will not continue as a permanent activity. This brings up a new science: *Ecological Economics* - we must do what the environment demands in order to keep our natural resources healthy, produc-

tive, and economically sustainable! Here is the great opportunity and challenge of our Time! We must be successful to survive!

I have long suspected that when we finally cross the Big Range, we will still use this earth as our home, and what we do to it now will determine whether it will be heaven or hell!

But then again, I wonder if it is possible that this will happen **before** we finally cross the Big Range?

Sylvan Runkel

